COLRUYT GROUP

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Colruyt Group: Who are we?

From a family-owned company to a family of companies



WE-Power: core activities





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* De investeringsholding Parkwind ontwikkelt, bouwt en exploiteert offshore windparken en heeft Colruyt Group als grootste aandeelhouder.

Contribute to the construction of a smart grid







Intelligent software (forecast, communication, optimalisation, control)

What about K(M)WT ?

Analysis parameters KWT

- Best available technology:
 - Technologie screening
 - Power curve (generator / rotor diameter, W/m2)
 - Specific investment cost (€/kWe)
 - O&M cost, reliability track record
- Siting:
 - Micro-siting: dominant wind, impact building, environment, ...
 - Impact on neighbourhood (shadow, noise)

Low wind at low altitude



Power curve 10 kWe WTs (15m)



Illustration of importance of generator / rotor Ø for large WTs V66



Potential siting ?

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Best possible location for a 10 kWe (Ø 9,7m) KWT as per LNE/2009/01

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When looking from another angle ...



Key outcomes for KWT

- Specific investment (€/kWe) ≥ off-shore WT
- Capacity factor (MWh/y/kWe installed) < < offshore WT
- Outleveling energy price by GSC perspectives (yearly adaptation onrendabale top)

→Economics at best possible site: insufficient TODAY

KWT compared to other options

- PV (specific cost, favorable permitting)
- Energy saving: e.g. LED lighting in our distribution centers (specific cost lower than KWT, high capacity factor)

Requirements to emerge K(M)WT's economics

- HAWT rotor diameter / generator ratio for class III to IV wind areas
- Reduce investment costs (difficult challenge unless large volumes/sales, standardisation, ...)
- Reliability and achieve low O&M costs: challenge for covering 20 years lifetime

→ hopefully, one day, the perspectives will be bright enough for a justified application of K(M)WT

Welcome for any questions / ideas / concept proposals but not of this kind







